



CONFERENCE ABSTRACT

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Protocol for the mainstreaming genetic counselling for genetic testing of *BRCA1* and *BRCA2* in ovarian cancer patients in Malaysia (MaGiC study)

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Abstract: Introduction: Identifying germline *BRCA* mutations in ovarian cancer patients is important in the medical management of affected patients and for their relatives who can take appropriate action to manage their risk. However, in Malaysia and most of Asia, access to genetic counselling and genetic testing are limited. Few studies on the prevalence of germline alterations in *BRCA1* and *BRCA2* in ovarian cancer and psychosocial aspects in an Asian population have been conducted. This study aims to establish a population-based cohort of ovarian cancer patients to (a) determine the prevalence of germline *BRCA1* and *BRCA2* mutations (b) determine the feasibility of training front-line medical practitioners (namely gynae-oncologists, gynaecologists, and oncologists) to provide genetic counselling for ovarian cancer patients in Malaysia and (c) investigate the psychosocial impact of genetic counselling and genetic testing in an Asian multi-cultural and multi-religious context. **Methods:** This is a prospective observational study to recruit 800 Malaysian women; with non-mucinous epithelial ovarian, peritoneal or fallopian tube cancer irrespective of family history, *via* a mainstreaming – clinician’s pathway where the patients are counselled by non-genetics clinicians or *via* the traditional genetics pathway. Interviews with patients are conducted *via* telephone after pre-test counselling and after result disclosure for feasibility and psychosocial impact. Clinicians will complete the Clinician Survey at 12 months after the recruitment of their first patient into the study. **Results:** Currently, there are 66 clinicians from 29 sites and 251 patients were enrolled, 216 *via* clinicians and 36 *via* genetics from August 2016 until September 2017. 208 were tested and 26 were identified pathogenic mutation carriers, 34 were variants of uncertain significance (VUS) and 148 were negatives. Feasibility and psychosocial questionnaires are ongoing. **Discussion:** The MaGiC study will determine the population based prevalence of *BRCA* mutation in ovarian cancer in Malaysia. As this is the first mainstreaming study in the region that it will demonstrate the feasibility and challenges of implementing mainstreaming in Malaysia.

Keywords: prevalence; genetic testing; mutation; ovarian cancer

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